Derrick Lin

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EDUCATION

University of California, San Diego   **Expected: June 2025**

Bachelor of Science in Computer Engineering and Cognitive Science (Machine Learning & Neural Computation), GPA: 3.5

Relevant Courses: Software Engineering, Data Structures/Algorithms, Machine Learning, Quantitative Finance, Operating Systems, Computer Graphics, Computer Architecture

Academic Awards: Provost Honors (3x)

WORK EXPERIENCE

Supermicro   **June 2024 - Present**

System Engineer (GPU Team)   San Jose, CA

- Diagnosed and troubleshoot operating systems and server hardware, ensuring optimal performance and system reliability on **x86 and ARM systems**
- Utilized **Horovod** to orchestrate distributed deep learning training across multiple GPUs, significantly enhancing computational efficiency and model training speed
- Developed and trained neural network architectures in **C++** using **Caffe**, leveraging **CUDA for GPU-accelerated processing**, significantly enhancing performance in deep learning tasks
- Implemented **training, inference pipelines, and fine-tuning** on **LLaMA** large language models, significantly enhancing natural language processing tasks
- Streamlined pipeline for updating system data by developing **Bash** and **Python** scripts to automate data processing tasks, resulting in a **100% reduction in manual intervention**

CodePath   **May 2024 - August 2024**

Tech Fellow   San Francisco, CA

- Mentored **30 students** weekly in algorithms and data structures, improving their problem-solving accuracy by **25%**

Stanford University   **April 2024 - June 2024**

Section Leader   Palo Alto, CA

- Led interactive weekly lab sessions for **100+ students** in Python programming and data structures, achieving a **95% satisfaction rating**

Qualcomm Institute   **January 2024 - June 2024**

Software Engineering Intern   La Jolla, CA

- Developed a high-resolution **digital twin** of the UCSD Campus using drone-based 3D photogrammetry and modeling
- Enhanced solar panel positioning and weather modeling by integrating **Python** scripting in Unreal Engine with a C++ plugin and utilizing the **AWIPS library** to optimize daily sunlight variations

LearnWise AI   **October 2023 - December 2023**

Software Engineering Intern   Remote, CA

- Developed and deployed **AWS Lambda** functions, resulting in faster response times for products like chatbots
- Used **Python** and **boto**3 to initiate AWS batch jobs to sort and clean customer data, resulting in a **40% reduction** in manual work through automated data processing tasks

LEADERSHIP EXPERIENCE

Computer Science and Engineering Society (CSES) at UCSD   **September 2023 - June 2024**

Event Director   La Jolla, CA

- Directed **40+ technical workshops and social events** annually, reaching over **2000 students**
- Launched a **mentorship program** that increased student participation in computer science by 50%

PROJECTS

Dev Journal | **Demo** | **Github Code** | (HTML, CSS, JavaScript, Node.js, Express.js, Jest-Puppeteer, SQLite)   **2024**

- Created a privacy-focused note-taking application using **AGILE methodologies**, improving data security and user experience

Fossil Fuel Predictor | **Demo** | **Github Code** | (Flask, HTML, CSS, JavaScript, Python)   **2024**

- Developed a data analysis platform to analyze and visualize correlations between dinosaur bone discoveries and fossil fuel production

TECHNICAL SKILLS

Languages | Java, Python, JavaScript, Typescript, C, C++, HTML, CSS, Swift, MATLAB

Technologies | React, Node.js, Next.js, FastAPI, PostgreSQL/SQLite, MongoDB, Express, Git, JUnit, TensorFlow, PyTorch

Software | AWS, Google Cloud Platform, Heroku, Valgrind, Firebase, Postman